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GREENING THE UNIVERSITY: CULTURAL TRANSFORMATION AND SUSTAINABLE PERFORMANCE THROUGH PROCUREMENT PRACTICES IN PALESTINE

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ABSTRACT

This research aims at investigating the relationship between Green Procurement Practices (GPP), Green Organizational Cultures (GOC), and Sustainable Performance (SP) within Higher Education Institutions (HEIs) in Palestine, specifically the role of GOC in mediating the relationship between GPP and SP using Partial Least Squares Structural Equation Modeling (PLS-SEM). Data from employees and procurement department managers at Palestinian HEIs was collected using a structured questionnaire. Following that, a PLS-SEM approach was employed to test the hypotheses and analyze the relationship, and the model was tested for reliability and validity through values of composite reliability, Cronbach's alpha, and average variance extracted, and relationships were established based on path coefficients, T-Values, and P-Values. Mediation was tested using the Bootstrapping technique. Statistical findings reveal both direct and indirect relationships between GPP and SP. The mediating role of GOC was statistically validated, highlighting its importance in enhancing the impact of GPP on SP. Results confirm that GPP significantly fosters GOC, which positively influences SP, emphasizing the value of integrating green practices and culture within institutions to achieve SP. While the findings of this research offer valuable insights to policy makers into the relationship between GPP and SP and the mediating role of GOC, this research is limited by the small population of employees and managers in procurement departments in HEIs, which resulted in a small sample size,

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potentially restricting the generalizability of results. Additionally, the reliance on self-administered questionnaires could potentially introduce bias. Future research may consider targeting larger sectors with more diversity and consider checking institutional policies or creating policy guides for institutions to be adapted and tailored to each institution's needs. The research contributes to the body of knowledge in this field and offers insights for policymakers to align procurement strategies with SP. This research adds to the existing body of literature on GPP and SP by investigating the mediating role of GOC in this relationship within HEIs, providing insights on how GPP influences GOC finally achieving Sustainable outcomes. The findings provide practical recommendations for decision-makers in procurement departments at HEIs, potentially promoting the adoption of such practices in other sectors.

KEYWORDS: Green Procurement Practices, Sustainable Performance, Green Organizational Culture, Cultural Transformation, Higher Education Institutions.

1. INTRODUCTION

The procurement department is considered one of the essential functions within any institution, as it handles daily purchasing activities while adhering to previously established protocols in almost every situation (Abbas et al., 2021). These pre-established procedures are governed by internal and external control guidelines, often lacking innovation and creative thinking, while focusing on limited criteria such as cost as a main factor, in addition to supplier's eligibility and delivery times. Alraja et al. (2022) compares different criteria for selecting suppliers to investigate the importance of the "lowest price" supplier selection philosophy, he concluded that clients tend to use broader evaluations that consider other criteria for selecting suppliers rather than only relying on choosing the lowest price. Major customers, including some procurement practitioners, often believe that a product's value is determined by its purchase cost (Yeşiltaş et al., 2022). Conversely, other significant factors, including quality, performance, durability, reliability, and customer satisfaction levels also influence a product's or service's value.

Despite this broader perspective, these criteria still fall within the realm of traditional evaluation methods. At the beginning of 20th century, some countries, including northern parts of America, Europe, and East Asia began integrating environmental considerations into procurement practices. In the current competitive market landscape, procurement is considered as a vital business function and its focus has shifted from immediate cost saving to long-term value creation and improving service delivery (Smith & Scott, 2023). Recently, many institutions and organizations have incorporated ESG (Economic, Social and Governance) and SDGs (Sustainable Development Goals) as integral components of their core policies and procedures. Since procurement activities are shaped by these policies and can impact their outcomes, procurement professionals must prioritize acquiring products and services that can contribute to achieving these goals (Al-Alawneh et al., 2023). These goals and considerations are encapsulated within the concept of sustainability, which has become the primary goal of modern organizations.

Sustainability is defined as the capability of meeting present needs without exploiting present resources, thereby sacrificing the needs of future generations (Fok et al., 2022). It also involves finding solutions to the global sustainability complex challenges by rapidly developing business innovations, applications, techniques, methods, products and processes that adapt to the changing circumstances (Ameer & Khan, 2023). Companies, governments, and non-governmental organizations (NGOs) usually use the triple-bottom-line (TBL) model for sustainability issues. This model bases sustainability on three pillars, namely social, economic, and environmental. At the present day, companies can no longer ignore sustainability, as the risks associated with the lack of sustainability are now of critical importance (Amjad et al., 2021). Procurement, an essential function within an organization, must play a role in reinforcing sustainability. This commitment requires procurement officers and other related professionals at organizations to establish policies and procedures that regulate supplier evaluation, as well as the selection of materials and products, in a way that considers economic, social, and environmental impacts to enhance sustainable performance (SP) (Al Doghan et al., 2024).

One of the most important tools for achieving sustainability in an organization is green procurement (GP). GP as a term refers to the process of acquisition and procurement of goods and services that cause minimal negative economic, social, and environmental impacts (Bertassini et al., 2021). The growing demand for recyclable materials, energy-efficient technologies, and clean fuels is driving the shift into adopting ecologically responsible business practices (Yeşiltaş et al., 2022). Green Procurement Practices (GPP) should be adopted and supported by appropriate environmental and governmental frameworks that enable manufacturers to generate products, materials and offer services that align with sustainable standards. Different researchers defined GP using different terminologies. GP was initially referred to as "Environmental Purchasing" or "Environmental Procurement", since it incorporates environmental considerations into purchasing decisions and policies that lead to the promotion of concepts like resource conservation, recycling, and reuse (Aldahdouh et al., 2023). Thus, GP supports sustainable development by reducing the environmental impact of operations within an organization.

In Palestine, as a developing country, there is generally a limited awareness of the environmental, economic and social considerations across most sectors (Aboramadan et al., 2022). To align with global expansion of GPP, and to respond to the growing trend of greening institutions, Palestinian HEIs should take the lead in adopting GP as a part of its strategic goals and daily activities. This is especially relevant given the fact that there are many globally positioned HEIs in Palestine (Milton et al., 2023). By integrating GP into their daily operations, HEIs, as key components of society, can contribute to

positive SP with significant social, economic, and environmental impacts.

The Palestinian context presents a distinctive socio-political environment where sustainability initiatives encounter significant structural and resource constraints (Itmazi & Khlaif, 2022). However, this setting also amplifies the symbolic and civic significance of adopting GPP. In a region characterized by political instability, infrastructure challenges, and policy vacuums, HEIs can act as pioneers in civic leadership by championing sustainability as a form of resilience and cultural preservation (Tarazi & Ruiz-Cecilia, 2023). Through these efforts, HEIs not only address environmental concerns but also assert agency in crafting a socio-environmental identity that counters adversity and contributes to collective well-being.

HEIs hold a distinctive position within society, not only as educational entities but also as influential cultural actors capable of shaping social values, environmental consciousness, and public attitudes toward sustainability (Kosasih et al., 2023; Murad et al., 2024). Beyond delivering academic curricula, HEIs model operational and ethical standards that extend to students, staff, and the wider community. By embedding sustainability principles within their administrative and procurement practices, universities can actively cultivate green mindsets and socially responsible behaviors among future generations of leaders, professionals, and policymakers (Awwad Al-Shammari et al., 2022; Murad et al., 2025). Consequently, procurement strategies transcend operational decisions, becoming instruments of cultural transformation that reflect and reinforce institutional commitments to sustainable development and public accountability (Abbas & Dogan, 2022).

Research specifically focusing on GP in Palestine is still scarce, if not nonexistent. This study adds to the sparse existing research regarding GP within Palestinian Higher Education Institutes. Additionally, this research explores the adoption and implementation of GPP in the unique context of an occupied state, taking into consideration specific challenges caused by scarce resources and restrictive regulations. This study also aims to provide insights that can contribute to reforming current traditional procurement systems and serve as a benchmark for future practices. By exploring current procurement practices in HEIs, as well as the challenges and opportunities for adopting GP, this research assesses several critical factors, including the level of awareness of employees and decision makers of GP in relevant HEI departments, the extent of investment in sustainable initiatives, the capabilities and willingness of procurement staff to adopt such practices into their daily operations, and the degree to which vendors selection criteria takes into account vendor's environmental performance.

1.1 Context of Study

The concept of sustainability has gained significant popularity in various sectors (Acquah et al., 2021). However, in Palestine, as it is in many developing countries, there is generally limited awareness on environmental issues and the environmental impact of organizational activities in various sectors. While traditional procurement polices often focus on cost efficiency and speed of delivery, these factors lack an understanding of the environmental, social, and economic impacts associated with purchasing decisions within the institutions (Al-Alawneh et al., 2023). These polices also fail to include several Important considerations, including product life cycle, carbon emissions associated with the transportation of purchased goods, and waste disposal mechanisms into procurement processes (Aggarwal & Agarwala, 2023). Therefore, supplier selection and evaluation, which involves the analysis of multiple criteria into the decision-making process, can incorporate factors like the environmental compliance of suppliers into the selection process (El Baz & Iddik, 2022). This is due to the fact that, contrary to what may be perceived, GP provides a long-term value for money (VFM).

Globally, greening processes in institutions has become a growing trend, as many institutions are trying to limit the negative environmental impacts of organizational processes (Qu et al., 2022). This can be attributed to the fact that the greening concept combines environmental sustainability and organizational effectiveness. Palestinian HEIs, as key components of the society in a developing country like Palestine, serve as primary drivers that support sustainable development. Therefore, they must have a leading role in the transition by adopting GPP into their strategic goals and daily activities, particularly in procurement, transportation, waste disposal, and renewable energy projects. Several Palestinian HEIs have already launched many greening projects inside their campuses, these often-tackled waste disposal mechanisms, tree planting, and encouraging environmentally friendly practices. However, these initiatives still lack the existence of clear policies, in addition to many global obstacles which may face HEIs in shifting towards a GP strategy. These may include regulatory, resource, and cultural constraints in addition to other challenges that must be addressed

in order to transition into GP systems (Fok et al., 2022).

Numerous challenges are faced by organizations to implement GPP. These were analyzed by many previous studies, which highlighted the absence of clear supplier environmental compliance selection criteria, in addition to the lack of resources, both human and financial, and inadequate skills of procurement professionals, and the resistance to change (Fok et al., 2023).

In order to address the challenges and opportunities of GPP in Palestinian HEIs, this research focuses on the following objectives. The primary objectives of this research are to evaluate the current level of GP adoption and Green Organizational Culture (GOC) within Palestinian HEIs, and to determine the relationship between the adoption of GP practices and SP in these institutions. Furthermore, the study aims to examine the relationship between GP adoption and the development of GOC, as well as to investigate the mediating role that GOC plays in the relationship between GP adoption and SP within the context of Palestinian HEIs.

In addition to these primary objectives, the study also seeks to achieve several secondary objectives. These include exploring the existing barriers to implementing GP practices in Palestinian HEIs, assessing the degree of stakeholder involvement in the adoption of such practices, and evaluating the capabilities and willingness of procurement staff to embrace GP initiatives. The research intends to identify key obstacles hindering the adoption of GP, such as time and financial constraints, lack of awareness, insufficient employee capabilities, and the absence of supportive policies and regulations. These factors will be analyzed as potential decision-making tools for institutional leaders. Moreover, the study will evaluate the extent to which environmental performance is considered in vendor selection processes within HEIs and assess the overall awareness of GP practices and their potential benefits among institutional stakeholders. Finally, the research seeks to identify the environmental, economic, and social advantages of adopting GP practices, with a particular focus on their role in reducing waste production, lowering carbon emissions, and promoting social responsibility. By demonstrating these benefits, the study aims to motivate HEIs and other organizations to integrate GP models within their operational frameworks.

2. LITERATURE REVIEW

The research model, along with the hypotheses adopted in this research are represented in the following diagram. The study explores the role of GPP, on SP in Palestinian HEIs. In addition to that, the model studies the role of GOC in this relationship, assuming that the adoption of GPP yields better outcomes on environmental, economic, and social aspects, and enhances the institutional reputation. The framework of this study is reported in Figure 1.

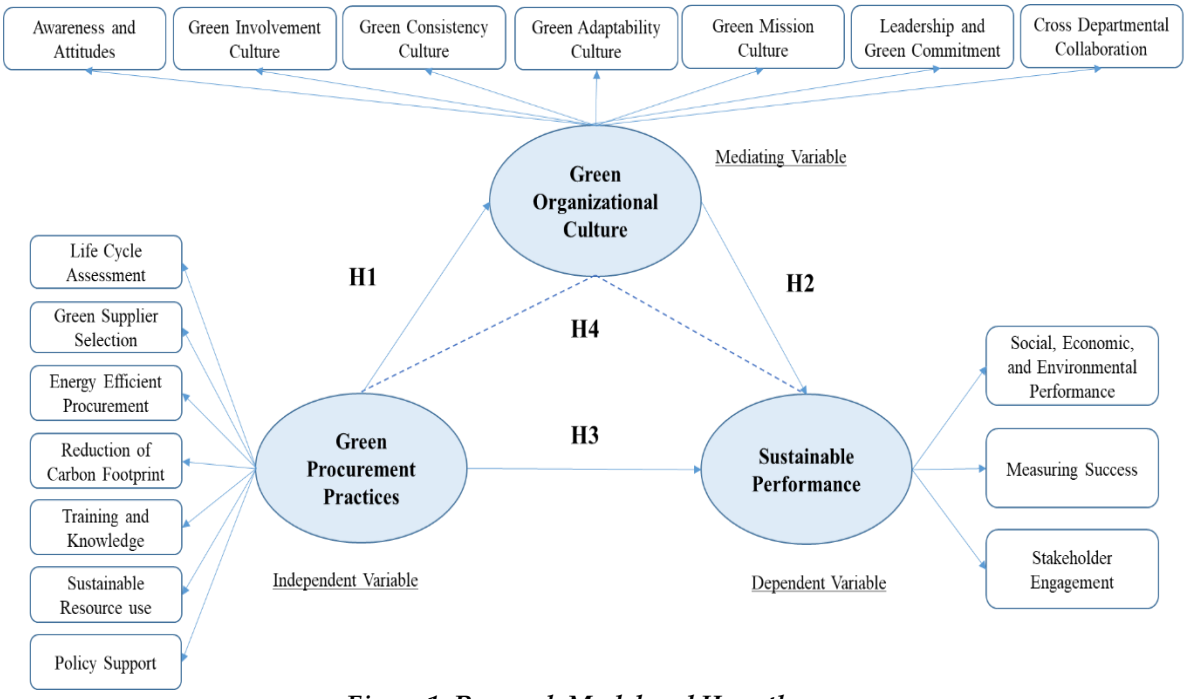

Figure 1: Research Model and Hypotheses.

GPP within HEIs do more than achieve operational efficiencies or meet environmental targets (Sharma et al., 2021), they actively contribute to the cultivation of a green organizational ethos. These practices shape everyday behaviors, inform decision-making ethics, and embody the institution's identity as a socially responsible actor. By integrating sustainability criteria into procurement protocols, HEIs convey their commitment to environmental stewardship to both internal and external stakeholders (Wang et al., 2022). This promotes a sense of shared responsibility, reinforces eco-friendly habits among employees and students, and positions the institution as a leader in embedding sustainability into organizational culture.

2.1 Hypotheses Development

2.1.1 Green Procurement Practices (GPP) and Green Organizational Culture (GOC)

The Procurement Act of 2003 was established with the aim of promoting efficiency, effectiveness, transparency and accountability of procurement processes. The primary goal of procurement involves ensuring a consistent supply of goods and services, facilitating efficient and effective purchasing and ethically securing cost-effective benefits (Al Doghan et al., 2024). Recognizing the concept of "best value for money" (VFM) requires significant efforts, innovation, in addition to modern and strategic thinking. Traditional procurement practitioners and decision-makers in organizations often evaluate value for money solely based on the cost (economic) dimension, overlooking other related factors that can affect long-term objectives.

Following the Earth' climate change concerns raised at the mid-20th century, environmental-related concepts began gaining prominence. One of the key concepts that emerged is GP, which emphasizes the consideration of environmental effects in procurement decisions aiming at the minimization of ecological impacts. Environmental considerations can be integrated into each procurement phase, including supplier selection, setting technical requirements and specifications, determining award criteria, and evaluating contract performance.

GP refers to the process by which goods and services are procured in a way that limits the possible associated negative environmental impacts. The adoption of environmentally friendly business practices is being strongly driven by the rising demand for recyclable goods as well as energy-efficient systems, clean technologies, and fuels (Galeazzo et al., 2021). According to Aggarwal and Agarwala (2023), Green Purchasing (GP) is defined as the process by which environmentally friendly purchases are made in a way that minimizes waste production and encourages recycling and reusing materials without compromising the material required performance.

Historically, prior to 1997, companies' accounting systems primarily considered the "single bottom line" approach, which only considers the financial outcomes in terms of "net profits "or "net losses" to judge the performance of a company or an institution, with immature frameworks regarding the concept of triple bottom line (TBL) theory which consider other related factors (Roos et al., 2023), expanded this framework by adding social and environmental (ecological) dimensions.

In response to the growing concern about corporate governance, the traditional framework was expanded and a new dimension was added to the previous framework, leading to the development of a theory known in literature as the Quadruple Bottom Line (QBL). Following that, the US Department of Defense publicized GPP related policies in 2004, with the aim of fully purchasing green products and services. The accelerated global adoption of GPP underscores the importance of establishing Green policies, engaging in environmentally friendly activities, adopting sustainable practices, and encouraging governmental support. These practices are crucial for enhancing organizations' sustainability and transforming organizations into greenish environments.

H1: Green Procurement Practices (GPP) have a positive impact on the development and enhancement of Green Organizational Culture.

2.1.2 Green Organizational Culture (GOC) and Sustainable Performance (SP)

As mentioned previously, climate change has emerged as a critical global challenge, following the rise of the earth's temperature caused by greenhouse emissions associated with human activities (Malik et al., 2021). The rise of global warming as a main concern that's threatening human existence highlights the interplay between science and society, poses challenges on international institutions of governance, and sparks novel social movements (Qu et al., 2022). Due to the adverse role of human social, economic, and environmental activities on climate change, decision-makers need to acknowledge root causes and incorporate climate considerations into decisions across all organizational functions to minimize the adverse effects of their activities on climate change and reinforce their commitment to SP

(Awwad Al-Shammari et al., 2022).

These procedures rely on the existence of a strong GOC among employees, which enhances their environmental awareness, and encourages eco-friendly practices that actively promote SP. Organizational culture encompasses collective values, beliefs, and principles that shape the behavior of employees, as well as the organization as a whole (Bandoophanit, 2024). With the accelerated global adoption of Green Practices, aimed at mitigating the causes of climate change, organizational culture has begun transforming into GOC, which can be defined as the set of deeply rooted values and principles that direct organizational activities toward implementing environmentally friendly, responsible activities (Barakat et al., 2023). Green culture is considered an invaluable resource since it plays a significant role in decision-making within an organization, and in fostering a work environment in which employees are contributing to long-term SP (Chowdhury et al., 2022).

As part of this shift, sustainability is increasingly becoming a social norm requiring special attention, this includes raising awareness, altering mindsets and attitudes, and affording social hubs. Higher Education Institutes already possess the vision, knowledge and capacity to drive the shift and lead this transition, in order to induce the changes towards this new paradigm (Ameer & Khan, 2023). The idea of universities acting civic participants or drivers for change emphasizes the potential for universities to be impactful, contributing, and influential institutes in society (Elshaer et al., 2023). Due to the increasing role of higher education institutes, the relevant role of the universities towards promoting sustainability concepts has expanded internationally. In response to this societal challenge, HEIs, on a global level have begun incorporating sustainability and adapting their missions and current practices as a disruptive theme of their activities (Sharma et al., 2021).

H2: Green Organizational Culture (GOC) has a positive impact on Sustainable Performance.

2.1.3 Green Procurement Practices (GPP) and Sustainable Performance (SP)

GP aims at reducing the negative environmental impacts associated with purchasing activities within institutions, and HEIs are no exception. To address these impacts, Martins et al. (2021) stress on the importance of using environmentally friendly materials and energy efficient equipment. Aming'a et al. (2025) also concluded that many South African Universities benefitted from investing in Renewable Energy and energy-efficient procurement activities, allowing them to achieve environmental compliance. Additionally, Wang et al. (2022) noted that adopting sustainable practices not only reduces operational costs, but also reduces waste generation, thereby improving waste management.

Not only do GPP bring positive environmental impacts for HEIs, but they also bring several social advantages by promoting the selection of suppliers that adhere to ethical labor practices. This improves the reputation and social image of HEIs and enhances their role in promoting social equity (Roos et al., 2023). Additionally, purchasing environmentally friendly products fosters healthier HEI environments, ultimately improving the overall well-being of students and staff (Agyapong et al., 2024). Finally, exposing students to such practices during their education allows them to grow better prepared to implement these practices into their future professional lives.

H3: Green Procurement Practices (GPP) indirectly affect Sustainable Performance by fostering a Green Organizational Culture.

2.1.4 Green Procurement Practices (GPP), Sustainable Performance (SP) and Green Organizational Culture (GOC)

The lack of awareness among suppliers, combined with the limited availability of eco-friendly or environmental products and services hinder the adoption of GP and the implementation of its practices within an organization. To address or mitigate this issue, Amjad et al. (2021) suggest that the number of green products might increase as governmental authorities create a demand for them. This means that if governments decide to prioritize and support green products themselves, they can drive market growth and recognition for these products and thus, suppliers would be incentivized to offer more environmentally friendly products. This will encourage other organizations to adopt green practices.

Governments in the public sector, much like top management in private sector, play a significant role in implementing policies that promote greening and sustainability of cultures and practices. However, without sufficient polices, regulations, incentives, or government support, and in the absence of a strong top management commitment, the transition to green evolution remains limited. Bertassini et al. (2021) point out another reason for the limited adoption of GPP, which is the general lack of incentives for enterprise mangers to promote green products and services to governmental agencies. Furthermore, the

time-consuming nature of the process also hinders the adoption of GPP. Ali et al. (2024) categorized GP adoption barriers into 12 main barriers of a composite nature, including the lack of sufficient time to address sustainability issues. Abbas and Dogan (2022) highlighted the lack of related research as another barrier that stands in the way of the widespread adoption of GPP. This gap in research limits the knowledge and awareness toward the benefits of GPP, and obstructs long-term impacts, government adoption, and support.

Reforming traditional procurement policies and procedures by implementing GPP may involve some barriers, especially since the concept of GOC remains in the early stages of development (Farooque et al., 2024). The attitudes and behaviors of an organization's members are usually influenced by the symbolic importance of environmental management and preservation within an environmentally friendly environment (Alraja et al., 2022). Like any new concept, GP or Sustainable Procurement (SP) requires the development of specialized knowledge, awareness-raising campaigns and capacity-building trainings targeting procurement officers, and the introduction of new practices, and it is likely to encounter resistance to change in such cases (Fuertes Giné et al., 2022).

Green Culture should be strongly enhanced within procurement departments, given its core role, carrying considerable environmental consequences (Fang et al., 2022). Procurement professionals must prioritize green considerations in both daily operations and strategic decision-making. To ensure that, management support is essential, by enabling, training and motivating procurement teams with respect to environmental considerations (El Baz & Iddik, 2022). This approach ensures that sustainability becomes a core value within an organization. "Sustainability Performance" often refers to the performance of a business across different dimensions for different sustainability drivers (Martins et al., 2021). Concerns and public knowledge regarding environmental sustainability are growing, and many organizations are incorporating sustainability into their plans and activities as part of their responsibility (Ali et al., 2023).

HEIs, as a key component of society, have an essential role in reinforcing sustainability concepts. This is due to their role as key influencers shaping future leaders who will be later contributing to the effective realization of the United Nations Sustainable Development Goals (SDGs) (Malik et al., 2021). In addition to their innovative role in addressing environmental issues through education, research, and social activities, by fostering sustainable practices, conducting research on sustainability development, and preparing future leaders to implement and practice green activities, HEIs play a significant role in implementing the 17 Sustainable Development Goals (SDGs) adopted by United Nations Member States in 2015.

H4: Green Procurement Practices directly affect Sustainable Performance.

2.2 Summary of Existing Gaps in Literature and Justification of the Current Study

Although GP has gained significant importance in recent years, research on this subject remains limited. Most studies focus primarily on public sectors and private organizations, with little attention to HEIs, or contexts of developing countries (Ali et al., 2020). This gap is particularly evident in countries facing specific social, political and economic struggles, such as Palestine. While countries like Malaysia and South Africa have made efforts to integrate GPP into their public procurement policies, these initiatives lack specificity to HEIs, even though these countries share similar characteristics to the Palestinian situation (Smith & Scott, 2023). Additionally, these studies overlook the role of GOC in sustaining these practices, and while some studies highlight the role of GOC as an essential driver for organizational SP, the extent of this mediating role remains unexplored. Additionally, the literature review revealed the lack of studies tackling the social, economic, and environmental benefits the adoption of GPP brings to organizations, specifically HEIs. Finally, given the economic, political, and social dimensions of Palestine (Itmazi & Khlaif, 2022), sustainability in green process is considered an important issue that can be used to overcome many challenges, specifically those faced by HEIs in such environments. This study seeks to fill these gaps and contribute to the existing body of research by tackling these issues and facilitating the adoption of GPP in HEIs, which can serve as a benchmark for other organizations to follow, not only in Palestine but also in countries with similar contexts.

3. RESEARCH DESIGN/METHODOLOGY

3.1. Research Formulation

In order to achieve the objectives of this research, an extensive literature review was conducted to identify relevant studies in this field, allowing for a comprehensive understanding on the theoretical framework that led to the formation of the research methodology used in this research. Following that, a

structured questionnaire was developed to be used as a main tool in data collection, focusing on three main constructs: GPP, GOC, and SP. The questionnaire addressed multiple aspects of GP, including supplier selection, life cycle assessment, sustainable resource usage, policy support, reduction of carbon footprint, as well as recycling and waste minimization. Additionally, organizational culture was evaluated by measuring the awareness, attitudes, behaviors, involvement, and long-term commitment of employees. Finally, SP was measured across environmental, economic, social, and reputational dimensions.

The questionnaire also included questions to measure respondents' initial opinions on the study topic and whether a relationship exists among the constructs in their opinions. This questionnaire was distributed among procurement managers and employees via Google Forms, due to accessibility constraints given to the current political situation in Palestine. It is also important to note that, given the political situation at the time of this study, HEIs in Gaza were excluded from the sample of this study. Data collected through the questionnaire was later analyzed using Smart-PLS to test the hypotheses and identify relationships between different constructs to provide evidence on the relationship between the three main constructs of this research. The detailed questionnaire is included in the appendix of this research.

3.2 Measures

In order to achieve the objective of this research, and to investigate the impact of GPP on SP in Palestinian HEIs, while examining the mediating role of GOC, and following an extensive literature review, similar studies were identified and thus, the theoretical framework of this study was formed.

The primary data collection tool used in this research was a questionnaire that specifically aimed at measuring the three main constructs of this study and ensured that each construct is well represented to allow for an accurate analysis of the relationships between these constructs. To study GPP, the questionnaire measures factors like the Life Cycle Assessment, Supplier Selection, Sustainable Resource Use, Policy Support, Carbon Footprint, and Recycling and Waste minimization. These reflect the dimensions of GP and the Organization's commitment to reducing the environmental impact of its purchasing activities. Additionally, to study GOC, factors like Employee Awareness, Attitudes and Behaviors, Involvement, Engagement, and Long Term Commitment to Green Practices were considered.

Finally, the SP construct was based on social, economic, and environmental performance, as well as measuring success and stakeholder involvement. Questions in this section focused on the perceived benefits of adopting such practices within the institution, such as cost savings, and reducing environmental impacts, and how GPP boost the sustainability goals of the institution. A 5-point Likert Scale was used across all items to measure agreement levels, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) to capture varied degrees of agreement with the statements of the questionnaire.

3.3 Study Population and Sample

The targeted population in this research comprises procurement managers and employees working in procurement departments in Palestinian HEIs and colleges. According to the Palestinian Central Bureau of Statistics, there were 49 HEIs across Palestine during the academic year of 2020/2021, with 32 located in the West Bank, and the remaining 17 in Gaza. Due to the current political situation, HEIs in Gaza were excluded from this study. The Sample size was calculated using Steven Thompson's formula, (Thompson, 2012).

However, and due to the different limitations, including the current political situation and the exclusion of HEIs in Gaza, as well as the nature of procurement departments in Palestinian HEIs, which are typically small, often comprising of 2-3 employees in most institutions, and in many cases, entirely nonexistent, relying on purchasing committees instead. The number of respondents who completed the questionnaire was 34, which accounts for a rate of response of 42.5% and is considered sufficient for the research' purposes and aligns with the limitations of this study.

4. RESULTS AND DATA ANALYSIS

4.1 Descriptive Statistics

The research sample comprised 34 participants, the demographics for which are displayed in the following table (Table 1). The gender analysis shows a slight majority of male respondents (58.82%), however it captures perspectives from both genders. Most respondents (64.71%) fall within the 25 – 39 age categories, which provides a mix of early and mid-career professionals, potentially likely to be involved in implementing and adapting sustainable procedures.

Regarding the years of experience in procurement, the majority of respondents (38.24%) had between 6 – 10 years of experience. This is critical

for understanding how GPP can be perceived and applied at different stages. The field of experience was dominantly scientific (70.5%), with a majority of (55.88%) of respondents holding bachelor's degrees. This distribution ensures the tendency of these employees to understand and apply GPP and represents a typical procurement department environment, making the sample representative. Job-level data within procurement departments was also collected and revealed that (41.18%) of participants were procurement department managers, while the remaining (58.82%) were employees at procurement departments. This provides a balance between decision-makers and practitioners, allowing the model to understand how GPP are viewed and applied across different levels within procurement departments. The diversity of participants ensure that the insights into the main constructs of the research model are comprehensive and further contribute to ensuring the validity of the model.

Table 1: Respondent Demographics.

Category		Number	Percentage
Gender	Male	20	58.82%
	Female	14	41.18%
Age Category	25 – 39 Years	22	64.71%
	40 – 54 Years	12	35.29%
Years of experience within the procurement department in the institution	5 years or less	10	29.41%
	6 – 10 years	13	38.24%
	11 – 20 years	6	17.65%
	More than 20 years	5	14.71%
Field of Specialization	Scientific	24	70.59%
	Humanities	10	29.41%
Educational Level	Diploma	2	5.88%
	Bachelor's	19	55.88%
	Master's	13	38.24%
Job Level	Procurement Department Manager	14	41.18%
	Employee at the procurement department	20	58.82%

4.2 Data Analysis and Common Method Bias Test

In order to be able to analyze participant responses, SMART-PLS Software 4.0, which is based on Partial Least Squares modeling was used. This method is considered suitable for small sample sizes and models comprising either formative or reflective constructs. To analyze the model properly, and since data was collected using a single source (self-filled questionnaire), common bias was tested using the collinearity assessment approach established by Hair et al. (2011). This ensures that responses are not influenced by the method instead of their actual differences. Following this method, Variance Inflation Factors (VIFs) for inner model variables were tested first to assess collinearity, and VIF factors should be less than 3.3 to ensure that the model is free from bias. Inner model VIFs for the model used in this study are all less than 3.3, as shown in (Table 2), which suggests that the model is free from bias, and thus, the results can be considered reliable and free from error and that the relationships between constructs are unlikely to be distorted by bias.

Table 2: VIFs for Inner Model Variables.

Hypothesized relationships	VIF
GOC → SP	2.400
GPP → GOC	1.000
GPP → SP	2.400

4.2.1 Measurement model

The model was used to test validity and reliability. This is done to ensure that the observed variables well represent the constructs they are intended to measure, as shown in Figure 2. After that, factor loadings were obtained from the model, in order to evaluate the reliability of the model. According to Hair et al. (2011), for the model to be reliable, all indicators must have factor loadings of 0.7 or above. Most indicators in the model used for this research had factor loadings of more than 0.7, except for two (B1 with a factor loading of 0.438, and B2 with a factor loading of 0.673). However, these indicators were kept in the model since the composite reliability of all constructs exceeded the 0.7 limit set by Hair et al. (2011), indicating internal consistency between constructs, and since these items represent a unique

aspect that was not covered by other indicators. Additionally, Composite Reliability Values and Cronbach Alpha values exceeded the 0.7 limit, and Average Variable Extracted values (AVEs) exceeded the 0.5 limit, which suggests that the model has convergent validity, and that the items correlate with their intended latent variables. These results are displayed in Table 3.

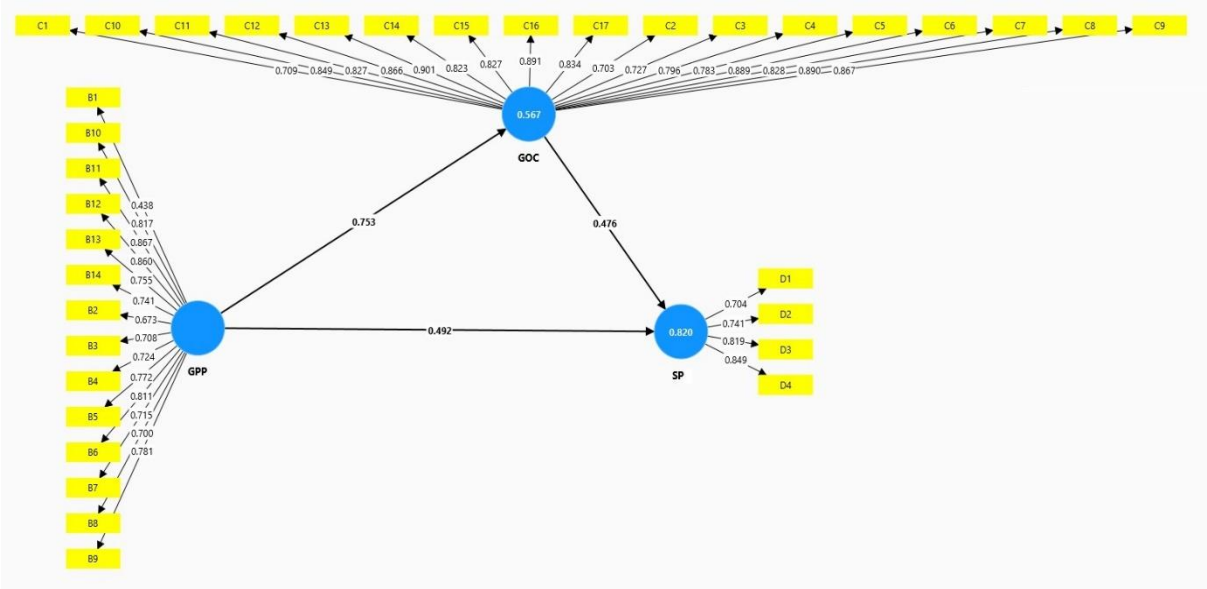

Figure 2: Research Measurement Model.

Table 3: Measurement Model Results.

Construct	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
GOC	0.973	0.976	0.975	0.699
GPP	0.944	0.952	0.951	0.586
SP	0.857	0.860	0.904	0.703

Additionally, to ensure that the constructs measure unique concepts, discriminant validity was tested using the Fornell-Larcker criterion, which measures the square root of the AVE of each construct against its correlation with other constructs, as mentioned by (Henseler et al., 2015). Table 4 summarizes these results.

Table 4: Discriminant validity - Fornell-Larcker criterion

Construct	GOC	GPP	SP
GOC	0.836		
GPP	0.764	0.766	
SP	0.789	0.788	0.838

4.2.2 Structural Model

In order to study the significance and reliability of path coefficients, Bootstrapping was used. This procedure further validates the reliability, significance and stability of outer loadings and path coefficients, and provides confidence intervals for these coefficients. Values of the coefficients of determination (R^2) are displayed in Table 5, and these values are classified into High (values of 0.5 to 0.75), Moderate (values between 0.25 and 0.5), and Weak (values between 0.25 and 0.5) based on their R^2 values (Hair et al., 2011).

Table 5: Values for coefficients of determination (R-square)

	R-square	R-square adjusted	Result
GOC	0.583	0.570	Moderate
SP	0.705	0.686	Substantial

Additionally, values of F^2 (Effect Size Value) were obtained to assess the impact that each exogenous (independent) construct has on related endogenous (dependent) constructs. Generally, these values are

classified based on Cohen et al. (2009) guidelines, and values above 0.35 are considered large, while values around 0.15 are considered medium and values around 0.02 are considered small. The results of F^2 are displayed in Table 6 below.

Table 6: Effect Size Value Results

Hypothesized Relationships	F^2	Result
GOC → SP	0.286	Medium
GPP → GOC	1.400	Very Large
GPP → SP	0.279	Medium

Finally, the proposed hypotheses in this research were tested for validation and for significance using path coefficients (β values) and T-values. The results are displayed in Table 7. According to Hair et al. (2017), the relationship is considered significant under these conditions; T-value is above 1.96 at a significance level of 5% and P-value below 0.05.

Table 7: Hypotheses Testing Using Path Coefficients and T-Values

Hypothesized Relationships	Original Sample (O)	Sample Mean (M)	Standard deviation (STDEV)	T-Values	P-Values	Decision
GOC → SP	0.476	0.484	0.142	3.349	0.001	Supported
GPP → GOC	0.753	0.755	0.127	5.910	0.000	Supported
GPP → SP	0.492	0.484	0.149	3.310	0.001	Supported

4.2.3 Testing mediation

In order to test the hypothesized mediation in this research, the significance of the indirect effect was first assessed. Since the P-Value for the indirect path was below 0.05, and the T-Value exceeded 1.96, this meant that mediation exists in this relationship. Table 8 summarizes the result of the mediation analysis, including total direct and indirect effects.

Table 8: Summary of Mediation Analysis

Type	Effect	Path Coefficients (β)	T-Values	P-Values	Remarks
Total Effect	GPP → SP	0.850	14.964	0.000	Significant
Direct Effect	GPP → SP	0.492	3.310	0.001	Significant
Indirect Effect	GPP → GOC → SP	0.358	2.655	0.008	Significant
Direct Effect	GPP → GOC	0.753	5.910	0.000	Significant
Direct Effect	GOC → SP	0.476	3.349	0.001	Significant

4.3 Survey Feedback and Analysis

Additionally, survey respondents were asked to provide their opinions on research hypotheses in the final section of the questionnaire, the majority of respondents expressed positive views. These are summarized in Table 9.

Table 9: Survey Respondent Statistics.

Statement	Majority response
In my opinion, green procurement practices foster a stronger green culture.	85% of respondents agreed
In my opinion, green practices increase awareness of environmental issues.	80% of respondents agreed
In my opinion, green culture leads to better environmental performance.	88% of respondents agreed
In my opinion, consistent green practices ultimately contribute to providing cost savings.	78% of respondents agreed
In my opinion, green procurement indirectly enhances sustainable performance by fostering green culture within institutions.	83% of respondents agreed
In my opinion, the benefits of green procurement become more evident with the existence of a strong green organizational culture.	86% of respondents agreed
In my opinion, green procurement practices have a direct positive impact on sustainable performance.	87% of respondents agreed
In my opinion, social and economic benefits result from adopting direct green procurement practices.	82% of respondents agreed

Participants also provided valuable insights and recommendations to improve GPP within Palestinian HEIs. The participants recommends to work on developing institutional reforms, including governmental policies and evaluation frameworks that monitor and report commitment to GPP, as well as establishing commitment across all institutional levels. Furthermore, the highlighted to create awareness raising by conducting training sessions, workshops and seminars to educate both employees and stakeholders on the importance of adopting GPP within their institutions, which will help placing GP

as a core value. This can be combined with using institutional websites and social media platforms to promote green practices through publishing success stories to inspire other sectors to adopt similar practices. In addition, it is recommended that suppliers to adopt environmentally friendly practices by providing incentives, and certifications, in addition to establishing partnerships with sustainable suppliers to integrate these practices into the supply chain of these institutions.

5. DISCUSSION

This research focuses on the testing of four hypotheses to study the relationship between three main constructs, namely GPP (independent variable), SP (independent variable), and GOC (mediator). The research assumes the existence of a direct effect of GPP (Independent Variable) and SP (Dependent Variable), as well as an indirect relationship between these variables through GOC. The findings of this research supported all hypotheses and confirmed the role of GOC as a Mediator within this relationship.

H1 results confirmed that GPP significantly influence the creation of a GOC. Path Coefficient (β) was equal to 0.753, while T-Values and P-Values were 5.910, and 0.000, respectively. These values are consistent with the thresholds set by Ali et al. (2024), confirming that the implementation of GPP have a positive impact on GOC within the institution. These findings align with previous research (Ali et al., 2023), for example concluded that GPP contribute to creating values and cultures across the organization, fostering an environment where the culture of responsibility is shared within the organization. Similarly, Barakat et al. (2023) highlighted the role of GPP in improving Organizational Culture by creating shared sustainable values and incorporating them into organizations. In addition to that, this finding is consistent with Aming'a et al. (2025) findings, suggesting that the growing environmental concerns have increasingly contributed to shaping organizational culture as a whole, which leads to greater adoption of Green Culture by both governmental and private sectors. As a result, this adoption contributes to enhancing GOC in HEIs as a part of these sectors. Therefore, the findings of this research are relevant to this hypothesis align with previous research and confirm the existence of a direct relationship.

Similarly, H2 results also confirmed that GOC significantly influences SP within the institution. Path Coefficient (β) in this relationship was equal to 0.476, while T-Values and P-Values were 3.349, and 0.001, respectively. These values are consistent with the thresholds set by Hair et al. (2017), confirming that GOC has a positive impact on SP within the institution. These findings align with previous research. According to Acquah et al. (2021), GOC ensures employees adopt sustainable practices in the long term. This is also consistent with the findings of Agyapong et al. (2024) and Farooque et al. (2024), who concluded that GOC fosters adaptability, collaboration, and innovation, all of which ultimately contribute to the achievement of sustainable outcomes. Therefore, the findings of this research are relevant to this hypothesis align with previous research and confirm the existence of a direct relationship.

Similarly, H3 results also confirmed that GPP significantly influences SP within the institution. Path Coefficient (β) in this relationship was equal to 0.492, while T-Values and P-Values were 3.310, and 0.001, respectively. These values are consistent with the thresholds set by Bandoophanit (2024), confirming that GOC has a positive impact on SP within the institution. These results align with the findings of Fuertes Giné et al. (2022), whose results concluded that sustainable procurement practices positively contribute to achieving SP. Similarly, the results align with the findings of a prior study, which concluded that the adoption of GPP leads to the purchasing of environmentally friendly products and enhancing positive social effects, which ultimately leads to the whole adoption of Sustainable Development Goals, improvement of reputation and social image of HEIs, and enhancement of their role in promoting social equity. Additionally, results confirm the Triple Bottom Line (TBL) theory, implying that integrating GPP into an institution minimizes costs, negative environmental impacts, and achieves social benefits as well. Therefore, the findings of this research are relevant to this hypothesis align with previous research and confirm the existence of a direct relationship.

Finally, H4 results also confirmed that GOC acts as a mediator in the relationship between GPP and Sustainable Practices within the institution. Path Coefficient (β) for the indirect path in this relationship was equal to 0.358, while T-Values and P-Values were 2.655, and 0.008, respectively. These values are consistent with the thresholds set by Ali et al. (2020), confirming that GOC mediates the relationship between GPP and Sustainable Practices within the institution. This is confirmed through previous related studies, which consider Green Culture awareness and knowledge as major barriers to implementing GPP (Galeazzo et al., 2021). The

findings reveal that GOC significantly enhances the relationship between GPP and SP in HEIs. As a result, it was confirmed in this research that not only GPP directly affect SP within the institution, but these also require fostering Green Organization Cultures. That being said, employing GPP within an institution ultimately instills green cultures and values within the institution. These, in turn, improve the SP within the institution.

6. CONTRIBUTIONS AND IMPLICATION

This research contributes to the existing literature on GP and sustainability in HEIs, since it addresses an existing gap in literature that involves the adoption of sustainable green practices in HEIs, despite the increased attention on sustainability and greening practices globally. By addressing this gap, the research serves as a benchmark for HEIs to improve their sustainability efforts. Additionally, it highlights the importance of environmental issues in the specific context of Palestine, which is considered a developing country lacking regulations, policies, and general awareness regarding green practices. This is combined with the absence of greening culture among procurement staff, and the absence of policies or procedures required to implement such practices.

Moreover, the research studies the role of GOC in supporting the adoption of environmentally friendly strategies and practices. While previous studies tackled greening and sustainability, they have not considered the role of fostering a GOC within the organization to sustain green initiatives and drive institutional change. Results confirm that implementing GPP will enrich the green culture within HEIs, not only for procurement staff but also at all administrative and academic levels, in addition to the student society. Decision makers in HEIs play a crucial role in enhancing green culture within their institutions, which ultimately leads to improved SP as part of the institution's strategy.

The implications of this study extend beyond the operational management of procurement departments in Palestinian HEIs. By highlighting the cultural, ethical, and civic dimensions of GP, the findings offer valuable insights for shaping national green public policy frameworks and inspiring cross-sectoral collaborations. Furthermore, HEIs' proactive engagement in sustainability practices can serve as a model for grassroots environmental movements, student-led sustainability campaigns, and public-sector reforms. This positions universities as influential nodes within broader societal networks, capable of driving cultural transformation toward a more environmentally conscious and socially responsible future.

As a part of this research questionnaire, several notes and suggestions were provided by respondents. Some of these notes indicate that many procurement managers and their staff lack knowledge about the "Green Procurement" term, which indicates the absence of greening culture among HEIs procurement staff. Both they and others suggested implementing workshops on GPP, which would ultimately contribute to enhancing green culture and practices within HEIs. These could later be extended to other government and private sectors. If supported by government regulation and adopted by the Palestinian Environment Quality Authority, an environmentally conscious culture for the future in Palestine can be shaped.

It is without a doubt that HEIs play a significant role in establishing values and principles in the society. By providing HEIs with a means of employing environmentally friendly procurement strategies into their operations, while tackling the challenges and opportunities that these practices bring to the organization, HEIs can take on a leading role, and guide the transition into a more sustainable future. Practically, the study informs policymakers on necessary interventions that aim at promoting sustainability in HEIs. Furthermore, the research offers insights that can inspire the development of roadmaps for other institutions of similar characteristics, since it can be replicated and tailored to the needs of other institutions, both in Palestine and in the neighboring countries. This promotes regional sustainable efforts and initiatives and provides social, environmental, and economic impacts.

7. CONCLUSIONS, LIMITATIONS, AND FUTURE RESEARCH DIRECTIONS

With reference to our collective understanding, this research is the first empirical study that focus the light on the "Green Procurement" term in Palestine, particularly within HEIs. It also addressed the absence of supportive regulations or instructions, and lack of awareness regarding green practices. The findings of this research form a nucleus for promoting a greening culture and practices within Palestinian HEIs, as it provides evidence of the positive relationship between GPP and SP. Additionally, it demonstrates the mediating role of GOC to strengthening this relationship. This research lays the foundations for future researches to evaluate the environmental, social and economic effects of GP practice adoption among both governmental and private sectors. While this research primarily focused

on the environmental and social effects, it paid less attention to the economic aspects due to the anticipated limitations in financial disclosure from competing HEIs. Future studies could also assess the green criteria for supplier's evaluation and selection to assess their impact on encouraging GPP within HEIs.

Beyond the operational improvements achieved through GPP, this research reveals the cultural and civic dimensions of sustainability in Palestinian HEIs. By integrating environmentally responsible procurement frameworks, these institutions not only reduce their ecological footprint but also foster a culture of environmental consciousness, social responsibility, and civic resilience. In contexts characterized by resource scarcity and political instability, such as Palestine, these practices become acts of civic leadership, symbolizing institutional values and inspiring public accountability. This positions universities as cultural influencers capable of shaping societal attitudes and promoting sustainability as a collective social norm. The findings highlight opportunities for policymakers and educational leaders to leverage procurement as a tool for cultural transformation and to align institutional operations with broader environmental governance frameworks.

Due to the circumstances surrounding the research, several limitations have been identified. First of all, the moderate responses from the potential respondents, despite personal communication with them by researchers, resulted in the collection of only 34 questionnaires from 32 HEIs in the West Bank and Jerusalem. Secondly, due to the current political situation, 17 HEIs from Gaza strip were excluded from target population. This present an opportunity for future researchers to implement similar studies on Gaza HEIs, particularly focusing on the environmental, social and economic consequences of infrastructure destruction. The time factor represents the third limitation of this research, as the time required to communicate with each college or university procurement department and provide a brief introduction about the research goals and objectives, as well as the concept of "Green Procurement" was a challenge. Finally, as previously mentioned, the lack of Green Culture led to less attention by some respondents. This can be addressed by spreading Green Culture throughout society as a whole.

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Annex 1: Questionnaire

The Impact of Green Procurement Practices on Sustainable Performance in Higher Education Institutions in Palestine: Exploring the Role of Green Organizational Culture
Palestinian Higher Education Institutions - Procurement Staff Questionnaire

Dear Esteemed Procurement Managers and Employees,
We kindly request your participation in this questionnaire to support our research on green procurement practices and their impact on sustainable performance in Palestinian Higher Education Institutions. Your responses are crucial to achieving the study's goals. Please be assured that all data will be kept confidential, and completing this questionnaire will not take more than 10 minutes. All information collected is for research purposes only.
Thank you for your valuable cooperation.
Research Team

Section 1: General Information

A1	**Gender**	□ Male □ Female
A2	**Age**	□ 18-24 years □ 25-39 years □ 40-55 years □ 55-65 years
A3	**Number of years working in procurement at your institution**	□ 5 years or less □ 6-10 years □ 11-20 years □ 21 years or more
A4	**Educational level**	□ High school or less □ Diploma □ Bachelor's □ Master's □ Doctorate
A5	**Job level**	□ Head of Procurement Department □ Employee at Procurement Department

Section 2: Green Procurement Practices
To what extent do you agree with the following statements?

#	Aspect	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
B 1	**Life Cycle Assessment**	Our institution considers the environmental impacts of purchased goods throughout their lifecycle (LCA) (production, use, disposal) and prioritizes energy-efficient products and alternative energy sources.	□	□	□	□	□
B 2	**Green Supplier Selection**	Priority is given to suppliers who adhere to environmental practices in their work, such as holding quality certifications (e.g., ISO 4001), and suppliers who demonstrate a commitment to reducing waste through sustainable production.	□	□	□	□	□
B 3		Priority is given to suppliers who produce or handle environmentally friendly products, including those who minimize packaging and recycling, aligning with our commitment to reducing our carbon footprint.	□	□	□	□	□
B 4		Suppliers with negative environmental impacts are excluded from the approved supplier list, supporting our goal to reduce the institution's overall carbon footprint.	□	□	□	□	□
B 5	**Energy-Efficient Procurement**	Our institution has standards and guidelines on energy criteria to follow before and during the purchasing process to ensure environmentally responsible procurement decisions.	□	□	□	□	□
B 6	**Reduction of Carbon Footprint**	Carbon dioxide emission standards are considered when assessing purchased goods and services.	□	□	□	□	□
B 7		Electric and hybrid vehicles are favored over fuel-based options.	□	□	□	□	□
B 8	**Sustainable Resource Use**	Choosing goods and services that include sustainable (renewable) resources is essential in our purchasing decisions, supporting economic efficiency and reducing environmental impacts.	□	□	□	□	□
B 9		Priority is given to suppliers committed to using sustainable resources, regardless of the higher cost, as part of our commitment to long-term economic sustainability.	□	□	□	□	□
B 10		The environmental impact of products is continuously evaluated within our institution to ensure sustainable resource use.	□	□	□	□	□
B 11	**Training and Knowledge**	Procurement staff receive regular training on green procurement practices, fostering environmental awareness and better supplier relationships that contribute to institutional reputation.	□	□	□	□	□

B 12		Clear guidelines and standards for green procurement practices are available to staff, supporting the institution's commitment to environmental, social, and economic sustainability.	□	□	□	□	□
B 13	**Policy Support**	The green procurement policy aligns with the institution's vision and goals, including long-term environmental benefits, quality improvement, and adherence to sustainable development goals.	□	□	□	□	□
B 14		Green procurement practices are regularly reviewed and updated to meet environmental standards, supporting our institution's social responsibility, compliance, and commitment to sustainability.	□	□	□	□	□

Section 3: Green Organizational Culture (GOC) **To what extent do you agree with the following statements?**							
#	**Aspect**	**Item**	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
C 1	**Awareness and Attitudes**	Employees at our institution are aware of the green procurement practices and initiatives implemented in the organization, fostering a positive attitude towards environmental responsibility.	□	□	□	□	□
C 2		The institution holds awareness workshops on the importance and nature of green procurement, reinforcing active engagement in green practices and socially responsible behaviors.	□	□	□	□	□
C 3		Employees actively seek opportunities to learn more about green procurement and sustainability, building long-term attitudes and commitment to environmental awareness.	□	□	□	□	□
C 4	**Green Involvement Culture**	Employees are encouraged to participate in green initiatives, creating a supportive environment for green behaviors and the institution's dedication to sustainable development goals.	□	□	□	□	□
C 5		There is active engagement across departments to promote sustainability, fostering long-term collaboration toward green practices and institutional resilience.	□	□	□	□	□
C 6	**Green Consistency Culture**	Our institution holds awareness workshops on the importance and nature of green procurement to ensure consistent understanding and support for sustainability initiatives and policies across departments.	□	□	□	□	□
C 7		Our institution promotes a culture of green innovation across various departments and divisions, enhancing employee behaviors, adaptability, and institution-wide dedication to green culture.	□	□	□	□	□
C 8	**Green Adaptability Culture**	Our institution actively adapts to green practices across different areas, creating a resilient and flexible culture that incorporates environmental sustainability goals.	□	□	□	□	□
C 9		Our institution encourages and supports employees' capacity to engage in green initiatives, fostering a long-term commitment to social and environmental sustainability goals.	□	□	□	□	□
C 10	**Green Mission Culture**	Our institution's mission includes principles of sustainability and environmental commitment, encouraging employees to integrate these goals into their daily activities and behaviors.	□	□	□	□	□
C 11		Employees consider the institution's green vision and sustainable development goals in their daily activities, strengthening organizational commitment and adaptability to green culture.	□	□	□	□	□
C 12	**Leadership and Green Commitment**	Management actively supports sustainability and green practices in various fields, ensuring long-term organizational alignment with environmental goals and collaboration.	□	□	□	□	□
C 13		Management consistently highlights the importance of sustainability and green practices in strategic plans, fostering a unified commitment to green initiatives and institutional resilience.	□	□	□	□	□
C 14	**Cross-Departmental Collaboration**	There is collaboration between different departments (e.g., finance, operations, sustainability) to support green procurement and strengthen cross-functional green involvement.	□	□	□	□	□
C 15		Green initiatives are celebrated and recognized across the institution, promoting active engagement and consistent support for sustainability efforts across departments.	□	□	□	□	□
C 16	**Long-Term Commitment**	Our institution has a long-term plan for improving sustainability through green practices, solidifying its reputation as a socially and environmentally responsible organization.	□	□	□	□	□
C 17		Sustainability goals are integrated into the institution's overall strategic planning, enhancing the institution's commitment to social and environmental impact.	□	□	□	□	□

Section 4: Sustainable Performance (SP) To what extent do you agree with the following statements?							
#	Aspect	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
D1	**Social, Economic, and Environmental Performance**	Our institution's sustainability efforts contribute positively to corporate social responsibility, and integrate social, economic, and environmental aspects for long-term performance improvements, reinforcing our commitment to sustainable development.	□	□	□	□	□
D2	**Measuring Success**	Our institution has criteria and procedures to evaluate the environmental, economic, and social impacts of green procurement practices, supporting institutional success and accountability in sustainability.	□	□	□	□	□
D3	**Stakeholder Engagement**	Stakeholders (employees and suppliers) are involved in implementing green practices, including green procurement, reinforcing institutional reputation and social responsibility	□	□	□	□	□
D4		Suppliers and stakeholders provide feedback and suggestions to adopt and improve green procurement practices, ensuring collaborative efforts in meeting institutional goals and reputation.	□	□	□	□	□

Section 5: To what extent do you agree with the following statements?						
#	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
E1	In my opinion, green procurement practices foster a stronger green culture.	□	□	□	□	□
E2	In my opinion, green practices increase awareness of environmental issues.	□	□	□	□	□
E3	In my opinion, green culture leads to better environmental performance.	□	□	□	□	□
E4	In my opinion, consistent green practices ultimately contribute to providing cost savings.	□	□	□	□	□
E5	In my opinion, green procurement indirectly enhances sustainable performance by fostering green culture within institutions.	□	□	□	□	□
E6	In my opinion, the benefits of green procurement become more evident with the existence of a strong green organizational culture.	□	□	□	□	□
E7	In my opinion, green procurement practices have a direct positive impact on sustainable performance.	□	□	□	□	□
E8	In my opinion, social and economic benefits result from adopting direct green procurement practices.	□	□	□	□	□

Additional Comments (Optional):

Please share any suggestions or insights that can help improve green procurement practices in Palestinian HEIs. Thank you for your cooperation.
Research Team